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- (71) Applicant (for all designated States except US): EVOTEC NEUROSCIENCES GMBH [DE/DE]; Schnackenburgallee 114, 22525 Hamburg (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): VON DER KAM-MER, Heinz [DE/DE]; Verbindungsstr. 6d, 22607 Hamburg (DE). POHLNER, Johannes [DE/DE]; Quittenweg 11, 22175 Hamburg (DE).
- (74) Agents: MEYERS, Hans-Wilhelm et al.; P.O. Box 10 22 41, 50462 Cologne (DE).

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(54) Title: DIAGNOSTIC AND THERAPEUTIC USE OF THE HUMAN HIF3ALPHA GENE AND PROTEINS FOR NEU-RODEGENERATIVE DISEASES

(57) Abstract: The present invention discloses the differential expression of a gene coding for HIF3a in specific brain regions of Alzheimer's disease patients. Based on this finding, the invention provides a method for diagnosing or prognosticating a neurodegenerative disease, in particular Alzheimer's disease, in a subject, or for determining whether a subject is at increased risk of developing such a disease. Furthermore, this invention provides therapeutic and prophylactic methods for treating or preventing Alzheimer's disease and related neurodegenerative disorders using the HIF3a gene and its corresponding gene products. A method of screening for modulating agents of neurodegenerative diseases is also disclosed.

